

**United States Environmental Protection Agency  
Region 7  
300 Minnesota Avenue  
Kansas City, KS 66101**

**Date:** SEP 29 2017

**Subject:** Transmittal of Sample Analysis Results for ASR #: 7611

Project ID: PMWDCGW1

Project Description: Wellman Dynamics Groundwater Investigation

**From:** Margaret E.W. St. Germain, Chief *M. St. Germain*  
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

**To:** Patricia Murrow  
AWMD/RCAP

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the Online ASR Sample/Data Disposition and Customer Survey for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Online ASR Sample/Data Disposition and Customer Survey.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

RCRA



RECEIVED

OCT 04 2017

AWMD/RCAP

**Project Manager:** Patricia Murrow**Org:** AWMD/RCAP**Phone:** 913-551-7627**Project ID:** PMWDCGW1**Project Desc:** Wellman Dynamics Groundwater Investigation**Location:** Creston**State:** Iowa**Program:** RCRA Enforcement**Purpose:** Site Characterization**GPRA PRC:** 303D99

Determine possible movement of contamination plume; validate analysis of facility's contract lab support on analyte of interest.

Sampling contact (BH) noted via phone on 8/30/17 that this ASR is not part of a litigation activity at this time.

#### **Explanation of Codes, Units and Qualifiers used on this report**

**Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.

**Units:** Specific units in which results are reported.

\_\_\_ = Field Sample

ug/L = Micrograms per Liter

FD = Field Duplicate

**Data Qualifiers:** Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

U = The analyte was not detected at or above the reporting limit.

ASR Number: 7611

Sample Information Summary

09/29/2017

Project ID: PMWDCGW1 Project Desc: Wellman Dynamics Groundwater Investigation

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 -		Water	GW Monitoring well 44		09/19/2017	10:13	09/19/2017	10:46	09/20/2017
2 -		Water	GW Monitoring well 46		09/19/2017	11:43	09/19/2017	13:27	09/20/2017
3 -		Water	GW Monitoring well 47		09/19/2017	12:16	09/19/2017	12:25	09/20/2017
4 -		Water	GW Monitoring well 48		09/20/2017	09:00	09/20/2017	09:19	09/20/2017
4 -	FD	Water	GW Monitoring well 48		09/20/2017	09:26	09/20/2017	09:43	09/20/2017
5 -		Water	GW Monitoring well 49		09/20/2017	09:28	09/20/2017	09:37	09/20/2017

ASR Number: 7611

RLAB Approved Analysis Comments

09/29/2017

Project ID: PMWDCGW1

Project Desc Wellman Dynamics Groundwater Investigation

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Analysis	Comments About Results For This Analysis
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1 1,4-Dioxane in Water by GC/MS SIM

**Lab:** REST Contract Lab (Out-Source)

**Method:** Similar to CLP SOW Method OLC03.2 (see comments)

**Samples:** 1-\_\_ 2-\_\_ 3-\_\_ 4-\_\_ 4-FD 5-\_\_

**Comments:**

(N/A)



**ASR Number:** 7611

**RLAB Approved Sample Analysis Results**

**09/29/2017**

**Project ID:** PMWDCGW1

**Project Desc:** Wellman Dynamics Groundwater Investigation

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
1 1,4-Dioxane in Water by GC/MS SIM 1,4-Dioxane	ug/L	0.137 U	0.137 U	0.137 U	0.137 U

**ASR Number:** 7611

**RLAB Approved Sample Analysis Results**

**09/29/2017**

**Project ID:** PMWDCGW1

**Project Desc:** Wellman Dynamics Groundwater Investigation

Analysis/ Analyte	Units	4-FD	5-__
1 1,4-Dioxane in Water by GC/MS SIM 1,4-Dioxane	ug/L	0.137 U	0.137 U

**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

EPA PROJECT MANAGER (Print) <i>Patricia Murrow</i>	SITE OR SAMPLING EVENT <i>ASR # 7611</i>	DATE OF SAMPLE COLLECTION(S) MONTH <i>9</i> DAY <i>20</i> YEAR <i>2017</i>	SHEET <i>1</i> of <i>1</i>
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**CONTENTS OF SHIPMENT**

ASR AND SAMPLE NUMBER	TYPE OF CONTAINERS				VOA SET (3 VIALS EA)	SAMPLED MEDIA				RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)	
	1 L PLASTIC BOTTLE	800 ML BOTTLE	BOTTLE	BOTTLE		WATER	SOLID	HAZ WASTE	AIR		OTHER
	NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER										
#7611-1		1				X					
#7611-2		3				X					#2 with MS/MSD volume
#7611-3		1				X					
#7611-4		1				X					
#7611-5		1				X					
#7611-6-FD		1				X					Field duplicate
← <i>4</i> END OF SAMPLES →											
<div style="transform: rotate(-45deg); font-size: 2em; opacity: 0.5;">ASR #7611 COMPLETE</div>											

DESCRIPTION OF SHIPMENT	MODE OF SHIPMENT
<i>8</i> CONTAINER(S) CONSISTING OF <i>0</i> CRATE(S) <i>2</i> ICE CHEST(S) OTHER _____	_____ COMMERCIAL CARRIER <input checked="" type="checkbox"/> SAMPLER CONVEYED _____ (SHIPPING AIRBILL NUMBER)

PERSONNEL CUSTODY RECORD						
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
<i>Patricia Murrow</i>	<i>9/20/17</i>	<i>1310</i>	<i>Whole Rock</i>	<i>9/20/17</i>	<i>1310</i>	<i>Analysis</i>
SEALING: <input checked="" type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			SEALING: <input checked="" type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			SEALING: <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 1    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-1-\_\_\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater Monitoring well 44

**Storet ID:** \_\_\_\_\_    **External Sample Number:** \_\_\_\_\_

**Expected Conc:** \_\_\_\_\_ (or Circle One: Low Medium High)    **Date** \_\_\_\_\_ **Time(24 hr)** \_\_\_\_\_  
**Latitude:** 41° 3.138' N    **Sample Collection: Start:** 9/19/2017 10:13  
**Longitude:** 94° 20.167' W    **End:** 9/19/2017 10:46

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

- (N/A) - groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions
- Lat/Long coordinates for MW-45 are same as MW-44

**Sample Collected By:** EPA

(split samples)

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 2    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-2-\_\_\_\_

Project ID: PMWDCGW1    Project Manager: Patricia Murrow  
Project Desc: Wellman Dynamics Groundwater Investigation  
City: Creston    State: Iowa  
Program: RCRA Enforcement

Location Desc: groundwater monitoring well 46

Storet ID: \_\_\_\_\_ External Sample Number: \_\_\_\_\_

Expected Conc: \_\_\_\_\_ (or Circle One: Low Medium High)

Latitude: 41° 3.076' N

Longitude: 94° 20.172' W

	Date	Time(24 hr)
Sample Collection: Start:	<u>9/19/2017</u>	<u>11:43</u> (1 <sup>st</sup> bottle)
End:	<u>9/19/2017</u>	<u>13:27</u> (3 <sup>rd</sup> bottle)

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater samples collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

- MS/MSD collection from this monitoring well:

1<sup>st</sup> bottle 11:43-12:07; 2<sup>nd</sup> bottle 12:46-13:07; 3<sup>rd</sup> bottle 13:07-13:27;  
time gap between 1<sup>st</sup> and 2<sup>nd</sup> bottles to allow facility contract sampler to complete his sampling at this location in time to transport his samples to waiting lab courier

Sample Collected By: EPA  
(split samples)

11:43-12:07  
12:46-13:07  
13:07-13:27

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 3    QC Code:    Matrix: Water    Tag ID: 7611-3-\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater Monitoring well 47

**Storet ID:**    **External Sample Number:**

**Expected Conc:**    (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**  
**Latitude:** 41° 3.076'N    **Sample Collection: Start:** 9/19/2017    12:16  
**Longitude:** 94° 20.172'W    **End:** 9/19/2017    12:25

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater sample collected via bladder pump from existing water column; no purge due to low yield of well

**Sample Collected By:** EPA

(split samples)

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 4    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-4-\_\_\_\_

Project ID: PMWDCGW1    Project Manager: Patricia Murrow  
Project Desc: Wellman Dynamics Groundwater Investigation  
City: Creston    State: Iowa  
Program: RCRA Enforcement

Location Desc: <sup>BFF monitoring</sup>  
~~Groundwater~~ well 48

Storet ID: \_\_\_\_\_ External Sample Number: \_\_\_\_\_

Expected Conc: \_\_\_\_\_ (or Circle One: ☒ Low    Medium    High)    Date    Time(24 hr)  
Latitude: 41° 2.77' N    Sample Collection: Start: 9/20/2017    9:00  
Longitude: 94° 20.207' W    End: 9/20/2017    9:19

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

Sample Collected By: EPA

(split samples)

# Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 7611

Sample Number: X4

QC Code: FD

Matrix: Water

Tag ID: 7611-63 FD

Project ID: PMWDCGW1

Project Manager: Patricia Murrow

Project Desc: Wellman Dynamics Groundwater Investigation

City: Creston

State: Iowa

Program: RCRA Enforcement

Location Desc: groundwater monitoring well 48

Storet ID: \_\_\_\_\_

External Sample Number: \_\_\_\_\_

Expected Conc: \_\_\_\_\_ (or Circle One: Low Medium High)

Date

Time(24 hr)

Latitude: 41° 2.971' N

Sample Collection: Start: 9/20/2017

9:26

Longitude: 94° 20.207' W

End: 9/20/2017

9:43

## Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

## Sample Comments:

(N/A)

- groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

Sample Collected By: EPA

(split samples)



**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 5    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-5-\_\_\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater monitoring well 49  
**Storet ID:** \_\_\_\_\_    **External Sample Number:** \_\_\_\_\_

**Expected Conc:** (or Circle One: ☒ Low    Medium    High)    **Date**    **Time(24 hr)**  
**Latitude:** 41° 29' 41" N    **Sample Collection: Start:** 9/20/2017    9:28  
**Longitude:** 94° 20' 20" W    **End:** 9/20/2017    9:37

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A)

- groundwater sample collected via bladder pump from existing water column; no purge due to low yield of well

**Sample Collected By:** EPA

(split samples)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 7

11201 Renner Boulevard  
Lenexa, Kansas 66219

OCT 06 2017

Mr. Charles Grant  
Crop Production Services, Inc.  
3005 Rocky Mountain Avenue  
Loveland, Colorado 80538

RE: Wellman Dynamics Corporation  
Creston, Iowa  
EPA ID # IAD065218737

Dear Mr. Grant:

On September 19, 2017, the U.S. Environmental Protection Agency Region 7 collected split groundwater samples (#7611-1, #7611-2 and #7611-3) at Crop Production Services, 1726 Osage Street, Creston, Iowa. The EPA had the samples analyzed for only one constituent, 1,4-Dioxane, using an analysis method with a lower method detection level than the method proposed by Wellman Dynamics Corporation.

Enclosed are copies of the sample collection field sheets and the corresponding analytical results. No health concerns were identified.

This information is being provided to you in accordance with Section 3007 of the Resource Conservation and Recovery Act, as amended.

Please contact me if you have any questions. I can be reached at (913) 551-7627. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Patricia Murrow".

Patricia Murrow  
Project Manager  
RCRA Corrective Action and Permits Section  
Waste Remediation and Permitting Branch  
Air and Waste Management Division

Enclosure



Printed on Recycled Paper

**United States Environmental Protection Agency  
Region 7  
300 Minnesota Avenue  
Kansas City, KS 66101**

**Date:** SEP 29 2017

**Subject:** Transmittal of Sample Analysis Results for ASR #: 7611

Project ID: PMWDCGW1

Project Description: Wellman Dynamics Groundwater Investigation

**From:** Margaret E.W. St. Germain, Chief *M. St. Germain*  
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

**To:** Patricia Murrow  
AWMD/RCAP

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the Online ASR Sample/Data Disposition and Customer Survey for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Online ASR Sample/Data Disposition and Customer Survey.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

RECEIVED

OCT 04 2017

AWMD/RCAP

**Project Manager:** Patricia Murrow**Org:** AWMD/RCAP**Phone:** 913-551-7627**Project ID:** PMWDCGW1**Project Desc:** Wellman Dynamics Groundwater Investigation**Location:** Creston**State:** Iowa**Program:** RCRA Enforcement**Purpose:** Site Characterization**GPRA PRC:** 303D99

Determine possible movement of contamination plume; validate analysis of facility's contract lab support on analyte of interest.

Sampling contact (BH) noted via phone on 8/30/17 that this ASR is not part of a litigation activity at this time.

#### **Explanation of Codes, Units and Qualifiers used on this report**

**Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.

**Units:** Specific units in which results are reported.

\_\_\_ = Field Sample  
FD = Field Duplicate

ug/L = Micrograms per Liter

**Data Qualifiers:** Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

U = The analyte was not detected at or above the reporting limit.

ASR Number: 7611

Sample Information Summary

09/29/2017

Project ID: PMWDCGW1    Project Desc: Wellman Dynamics Groundwater Investigation

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 - ____		Water	GW Monitoring well 44		09/19/2017	10:13	09/19/2017	10:46	09/20/2017
2 - ____		Water	GW Monitoring well 46		09/19/2017	11:43	09/19/2017	13:27	09/20/2017
3 - ____		Water	GW Monitoring well 47		09/19/2017	12:16	09/19/2017	12:25	09/20/2017
4 - ____		Water	GW Monitoring well 48		09/20/2017	09:00	09/20/2017	09:19	09/20/2017
4 - FD		Water	GW Monitoring well 48		09/20/2017	09:26	09/20/2017	09:43	09/20/2017
5 - ____		Water	GW Monitoring well 49		09/20/2017	09:28	09/20/2017	09:37	09/20/2017

ASR Number: 7611

RLAB Approved Analysis Comments

09/29/2017

Project ID: PMWDCGW1

Project Desc Wellman Dynamics Groundwater Investigation

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Analysis	Comments About Results For This Analysis
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1 1,4-Dioxane in Water by GC/MS SIM

**Lab:** REST Contract Lab (Out-Source)

**Method:** Similar to CLP SOW Method OLC03.2 (see comments)

**Samples:** 1-\_\_ 2-\_\_ 3-\_\_ 4-\_\_ 4-FD 5-\_\_

**Comments:**

(N/A)

**ASR Number:** 7611

**RLAB Approved Sample Analysis Results**

**09/29/2017**

**Project ID:** PMWDCGW1

**Project Desc:** Wellman Dynamics Groundwater Investigation

<b>Analysis/ Analyte</b>	<b>Units</b>	<b>1-__</b>	<b>2-__</b>	<b>3-__</b>	<b>4-__</b>
1 1,4-Dioxane in Water by GC/MS SIM 1,4-Dioxane	ug/L	0.137 U	0.137 U	0.137 U	0.137 U

**ASR Number:** 7611

**RLAB Approved Sample Analysis Results**

**09/29/2017**

**Project ID:** PMWDCGW1

**Project Desc:** Wellman Dynamics Groundwater Investigation

<b>Analysis/ Analyte</b>	<b>Units</b>	<b>4-FD</b>	<b>5-__</b>
1 1,4-Dioxane in Water by GC/MS SIM 1,4-Dioxane	ug/L	0.137 U	0.137 U



**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

EPA PROJECT MANAGER (Print) <b>Patricia Murrow</b>	SITE OR SAMPLING EVENT <b>ASR # 7611</b>	DATE OF SAMPLE COLLECTION(S) MONTH <b>9</b> DAY <b>20</b> YEAR <b>2017</b>	SHEET <b>1</b> of <b>1</b>
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**CONTENTS OF SHIPMENT**

ASR AND SAMPLE NUMBER	TYPE OF CONTAINERS				VOA SET (3 VIALS EA)	SAMPLED MEDIA				RECEIVING LABORATORY REMARKS OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)	
	1 L PLASTIC BOTTLE	80 OZ. BOTTLE	BOTTLE	BOTTLE		WATER	SOLID	HAZ WASTE	AIR		
	NUMBER(S) OF CONTAINERS PER SAMPLE NUMBER										
#7611-1		1				X					
#7611-2		3				X				#2 with MS/MSD volume	
#7611-3		1				X					
#7611-4		1				X					
#7611-5		1				X					
#7611-6 (FD)		1				X				Field duplicate	
<div style="border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px;"> <b>← 4 END OF SAMPLES →</b> </div>											
<div style="transform: rotate(-45deg); font-size: 2em; opacity: 0.5;"> ASR #7611 COMPLETE </div>											

<b>DESCRIPTION OF SHIPMENT</b> 8 CONTAINER(S) CONSISTING OF 0 CRATE(S) 2 ICE CHEST(S), OTHER	<b>MODE OF SHIPMENT</b> COMMERCIAL CARRIER <input checked="" type="checkbox"/> SAMPLER CONVEYED
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PERSONNEL CUSTODY RECORD						
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
<input checked="" type="checkbox"/> SEALED <b>Patricia Murrow</b> <input type="checkbox"/> UNSEALED	9/20/17	1310	<input checked="" type="checkbox"/> SEALED <b>Wade Ryley</b> <input type="checkbox"/> UNSEALED	9/20/17	1310	<b>Analysis</b>
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			
RELINQUISHED BY (PM/SAMPLER)	DATE	TIME	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 1    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-1-\_\_\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater Monitoring well 44

**Storet ID:** \_\_\_\_\_    **External Sample Number:** \_\_\_\_\_

**Expected Conc:** \_\_\_\_\_ (or Circle One: Low Medium High)    **Date** \_\_\_\_\_    **Time(24 hr)** \_\_\_\_\_

**Latitude:** 41° 3.138' N    **Sample Collection: Start:** 9/19/2017 10:13  
**Longitude:** 94° 20.167' W    **End:** 9/19/2017 10:46

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

- (N/A) - groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions
- Lat/Long coordinates for MW-45 are same as MW-44

**Sample Collected By:** EPA

(split samples)

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 2    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-2-\_\_\_\_

Project ID: PMWDCGW1    Project Manager: Patricia Murrow  
Project Desc: Wellman Dynamics Groundwater Investigation  
City: Creston    State: Iowa  
Program: RCRA Enforcement

Location Desc: groundwater monitoring well 46

Storet ID: \_\_\_\_\_

External Sample Number: \_\_\_\_\_

Expected Conc: \_\_\_\_\_ (or Circle One: Low Medium High)

Latitude: 41° 3.076' N

Longitude: 94° 20.172' W

Date    Time(24 hr)  
Sample Collection: Start: 9/19/2017    11:43 (1<sup>st</sup> bottle)  
End: 9/19/2017    13:27 (3<sup>rd</sup> bottle)

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater samples collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

- MS/MSD collection from this monitoring well:

1<sup>st</sup> bottle 11:43-12:07; 2<sup>nd</sup> bottle 12:46-13:07; 3<sup>rd</sup> bottle 13:07-13:27;  
time gap between 1<sup>st</sup> and 2<sup>nd</sup> bottles to allow facility contract sampler to complete his sampling at this location in time to transport his samples to waiting lab courier

Sample Collected By: EPA

(split samples)

11:43-12:07

12:46-13:07

13:07-13:27

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 3    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-3-\_\_\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater Monitoring well 47

**Storet ID:** \_\_\_\_\_    **External Sample Number:** \_\_\_\_\_

**Expected Conc:** \_\_\_\_\_ (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**  
**Latitude:** 41° 3.076'N    **Sample Collection: Start:** 9/19/2017 12:16  
**Longitude:** 94° 20.172'W    **End:** 9/19/2017 12:25

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater sample collected via bladder pump from existing water column; no purge due to low yield of well

**Sample Collected By:** EPA

(split samples)

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 4    QC Code:    Matrix: Water    Tag ID: 7611-4-\_\_

**Project ID:** PMWDCGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** BFF monitoring  
groundwater well 48

**Storet ID:**    **External Sample Number:**

**Expected Conc:**    (or Circle One: ☒ Low    ☐ Medium    ☐ High)    **Date**    **Time(24 hr)**  
**Latitude:** 41° 2.971' N    **Sample Collection: Start:** 9/20/2017    9:00  
**Longitude:** 94° 20.207' W    **End:** 9/20/2017    9:19

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A) - groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

**Sample Collected By:** EPA

(split samples)

# Sample Collection Field Sheet

US EPA Region 7  
Kansas City, KS

ASR Number: 7611 Sample Number: 14 QC Code: FD Matrix: Water Tag ID: 7611-65 FD

Project ID: PMWDCGW1 Project Manager: Patricia Murrow  
Project Desc: Wellman Dynamics Groundwater Investigation  
City: Creston State: Iowa  
Program: RCRA Enforcement

Location Desc: groundwater monitoring well 48

Storet ID: \_\_\_\_\_ External Sample Number: \_\_\_\_\_

Expected Conc: \_\_\_\_\_ (or Circle One: Low Medium High) Date \_\_\_\_\_ Time(24 hr) \_\_\_\_\_  
Latitude: 41° 2.971' N Sample Collection: Start: 9/20/2017 9:26  
Longitude: 94° 20.207' W End: 9/20/2017 9:43

## Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

## Sample Comments:

(N/A) - groundwater sample collected via low-flow peristaltic pump after purge indicated stable groundwater conditions

Sample Collected By: EPA

(split samples)

**Sample Collection Field Sheet**  
US EPA Region 7  
Kansas City, KS

ASR Number: 7611    Sample Number: 5    QC Code: \_\_\_\_    Matrix: Water    Tag ID: 7611-5-\_\_\_\_

**Project ID:** PMWD CGW1    **Project Manager:** Patricia Murrow  
**Project Desc:** Wellman Dynamics Groundwater Investigation  
**City:** Creston    **State:** Iowa  
**Program:** RCRA Enforcement

**Location Desc:** groundwater monitoring well 49  
**Storet ID:** \_\_\_\_\_    **External Sample Number:** \_\_\_\_\_  
**Expected Conc:** (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**  
**Latitude:** 41° 29.71' N    **Sample Collection: Start:** 9/20/2017    9:28  
**Longitude:** 94° 20.207' W    **End:** 9/20/2017    9:37

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
1 - 80 oz amber glass	4 Deg C	7 Days	1 1,4-Dioxane in Water by GC/MS SIM

**Sample Comments:**

(N/A)

- groundwater sample collected via bladder pump from existing water column; no purge due to low yield of well

**Sample Collected By:** EPA

(split samples)